**U.S. Outlook**

**HIGH-TECH IS KEY**
Share of Job Growth From Information-Related Services Industries

**Percent Change Over Previous Year**

<table>
<thead>
<tr>
<th></th>
<th>June '96</th>
<th>'97</th>
<th>'98</th>
<th>Dec'98</th>
</tr>
</thead>
<tbody>
<tr>
<td>IBM</td>
<td>2,657</td>
<td>2,090</td>
<td>2,980</td>
<td>4,310</td>
</tr>
<tr>
<td>Canon</td>
<td>1,928</td>
<td>1,532</td>
<td>1,951</td>
<td>2,661</td>
</tr>
<tr>
<td>NEC</td>
<td>1,627</td>
<td>1,284</td>
<td>1,671</td>
<td>2,349</td>
</tr>
<tr>
<td>Motorola</td>
<td>1,406</td>
<td>1,102</td>
<td>1,559</td>
<td>2,088</td>
</tr>
<tr>
<td>Sony</td>
<td>1,316</td>
<td>1,004</td>
<td>1,392</td>
<td>1,786</td>
</tr>
<tr>
<td>Samsung Elec.</td>
<td>1,304</td>
<td>1,170</td>
<td>1,322</td>
<td>2,068</td>
</tr>
<tr>
<td>Fujitsu</td>
<td>1,189</td>
<td>970</td>
<td>1,109</td>
<td>1,513</td>
</tr>
<tr>
<td>Toshiba</td>
<td>1,170</td>
<td>970</td>
<td>1,109</td>
<td>1,513</td>
</tr>
<tr>
<td>Eastman Kodak</td>
<td>1,124</td>
<td>941</td>
<td>1,109</td>
<td>1,513</td>
</tr>
<tr>
<td>Hitachi</td>
<td>1,094</td>
<td>911</td>
<td>1,109</td>
<td>1,513</td>
</tr>
</tbody>
</table>

**U.S. Outlook**

**RECORD PATENT GROWTH**

**Number of U.S. Patents 1992-98** (THOUSANDS)

**Big Companies Grab for More**

**TOP PRIVATE SECTOR PATENT RECIPIENTS 1997-98**

<table>
<thead>
<tr>
<th>Company</th>
<th>1998</th>
<th>1997</th>
<th>Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>IBM</td>
<td>2,657</td>
<td>1,707</td>
<td>+55.1%</td>
</tr>
<tr>
<td>Canon</td>
<td>1,928</td>
<td>1,474</td>
<td>+29.7%</td>
</tr>
<tr>
<td>NEC</td>
<td>1,627</td>
<td>1,255</td>
<td>+29.5%</td>
</tr>
<tr>
<td>Motorola</td>
<td>1,406</td>
<td>1,102</td>
<td>+27.6%</td>
</tr>
<tr>
<td>Sony</td>
<td>1,316</td>
<td>1,004</td>
<td>+31.1%</td>
</tr>
<tr>
<td>Samsung Elec.</td>
<td>1,304</td>
<td>1,109</td>
<td>+18.3%</td>
</tr>
<tr>
<td>Fujitsu</td>
<td>1,169</td>
<td>920</td>
<td>+30.8%</td>
</tr>
<tr>
<td>Toshiba</td>
<td>1,170</td>
<td>920</td>
<td>+32.3%</td>
</tr>
<tr>
<td>Eastman Kodak</td>
<td>1,124</td>
<td>908</td>
<td>+24.1%</td>
</tr>
<tr>
<td>Hitachi</td>
<td>1,094</td>
<td>910</td>
<td>+20.3%</td>
</tr>
</tbody>
</table>
**U.S. Outlook**

**CONSUMER CONFIDENCE**
More Cautious, But Still Upbeat

**U.S. Outlook**

**LAYOFFS IN MANUFACTURING**
Cumulative Changes in Jobs Since Jan. ‘98
U.S. Outlook

U.S. UNEMPLOYMENT RATE
Historical Low

Percent Change


U.S. Outlook

OIL & COMMODITY PRICE MOVEMENTS

1st Quarter 1995 = 100

OECD Crude
Non-Oil Commodities

1995 '96 '97 '98
**U.S. Outlook**

**U.S. DOMESTIC OIL PRICE**

Prices Declined, Now Some Recovery

![Graph of West Texas Intermediate Oil Price (1994-1998)]

**U.S. Outlook**

**U.S. INFLATION**

Remains Modest

![Graph of Year Over Year % Change (1994-1998)]
U.S. Outlook
THE INDESTRUCTIBLE DOW
Rebounding to new highs...

Dow Jones Industrial Average


9800 9600
9400 9000
9200
8800 8400
8200 8000
7800
7600
7400

U.S. Outlook
U.S. SALES OF INDIGESTION REMEDIES

1993 - 2001

0 0.5 1.0 1.5 2.0 2.5

1993 '94 '95 '96 '97 '98

Munroe Consulting January 1999
U.S. Outlook

CURRENCIES UNDER CONTAGION
1994 - 1999

U.S. Outlook

U.S. FORECAST SUMMARY

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1st Half</td>
<td>2nd Half</td>
<td>1st Half</td>
<td>2nd Half</td>
</tr>
<tr>
<td>Real GDP Growth</td>
<td>4.1</td>
<td>3.6</td>
<td>3.6</td>
<td>3.9</td>
</tr>
<tr>
<td>(half yr. avg.)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Unemployment Rate</td>
<td>4.9</td>
<td>4.7</td>
<td>4.4</td>
<td>4.4</td>
</tr>
<tr>
<td>(qtr. ending)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Inflation Rate:</td>
<td>1.9</td>
<td>1.4</td>
<td>2.0</td>
<td>2.4</td>
</tr>
<tr>
<td>CPI 1.5</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(half yr. avg.)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Interest Rates:</td>
<td>5.5</td>
<td>5.5</td>
<td>5.5</td>
<td>4.75</td>
</tr>
<tr>
<td>Fed Funds</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(last mo. of period)</td>
<td></td>
<td></td>
<td></td>
<td>4.75</td>
</tr>
<tr>
<td>30-Yr Govt.</td>
<td>6.8</td>
<td>6.0</td>
<td>5.7</td>
<td>6.0</td>
</tr>
<tr>
<td>(last mo. of period)</td>
<td></td>
<td></td>
<td></td>
<td>6.0</td>
</tr>
</tbody>
</table>

Munroe Consulting January 1999
U.S. Outlook

COMPUTERS AND SILICON CHIPS
1994 - 1999

Output
BILLIONS OF '98 DOLLARS

<table>
<thead>
<tr>
<th>Year</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>94</td>
<td>67.47</td>
</tr>
<tr>
<td>99</td>
<td>221.40</td>
</tr>
</tbody>
</table>

Employment
MILLIONS OF WORKERS

<table>
<thead>
<tr>
<th>Year</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>94</td>
<td>0.54</td>
</tr>
<tr>
<td>99</td>
<td>0.61</td>
</tr>
</tbody>
</table>

+ • PC Sales Growth to 14%
  • Semiconductor Growth to 9%
- • Asian Economy
  • Y2K Bug

U.S. Outlook

SOFTWARE
1994 - 1999

Output
BILLIONS OF '98 DOLLARS

<table>
<thead>
<tr>
<th>Year</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>94</td>
<td>162.82</td>
</tr>
<tr>
<td>99</td>
<td>273.24</td>
</tr>
</tbody>
</table>

Employment
MILLIONS OF WORKERS

<table>
<thead>
<tr>
<th>Year</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>94</td>
<td>1.07</td>
</tr>
<tr>
<td>99</td>
<td>1.90</td>
</tr>
</tbody>
</table>

+ • Electronic Commerce Growth
  • Business Applications Grow 30%
- • Asian Economy
  • Y2K Bug
**U.S. Outlook**

**TELECOMMUNICATIONS**

1994 - 1999

- **Output**
  - BILLIONS OF '98 DOLLARS
  - 234.02 in 1994, 339.68 in 1999

- **Employment**
  - MILLIONS OF WORKERS
  - 1.06 in 1994, 1.26 in 1999

**+**
- Rapid Traffic Growth
- Deregulation

**-**
- Lower Prices Cut Profits
- New Foreign Players

---

**U.S. Outlook**

**AEROSPACE**

1994 - 1999

- **Output**
  - BILLIONS OF '98 DOLLARS
  - 104.55 in 1994, 140.41 in 1999

- **Employment**
  - MILLIONS OF WORKERS
  - 0.59 in 1994, 0.59 in 1999

**+**
- Revenues to All-Time Highs
- Better Financial Controls

**-**
- Cancelled Aircraft Orders
- Consolidation in Europe
**U.S. Outlook**

**ENERGY**

1994 - 1999

<table>
<thead>
<tr>
<th>Output BILLIONS OF '98 DOLLARS</th>
</tr>
</thead>
<tbody>
<tr>
<td>237.13</td>
</tr>
<tr>
<td>250.73</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Employment MILLIONS OF WORKERS</th>
</tr>
</thead>
<tbody>
<tr>
<td>.60</td>
</tr>
<tr>
<td>.51</td>
</tr>
</tbody>
</table>

**TRANSPORTATION**

1994 - 1999

<table>
<thead>
<tr>
<th>Output BILLIONS OF '98 DOLLARS</th>
</tr>
</thead>
<tbody>
<tr>
<td>334.08</td>
</tr>
<tr>
<td>390.37</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Employment MILLIONS OF WORKERS</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.08</td>
</tr>
<tr>
<td>3.45</td>
</tr>
</tbody>
</table>

**+**
- Crude Oil Prices Stabilize
- Better Prepared for Downturn

**-**
- Demand Sluggish
- Natural Gas Prices Drop

**+**
- Trucking Up, Higher Rates
- Low Fuel costs
- Union Pacific Recovery

**-**
- Conrail Breakup
- Regulatory
- Driver Shortages
### U.S. Outlook

#### AUTOS
1994 - 1999

<table>
<thead>
<tr>
<th>Output</th>
<th>Employment</th>
</tr>
</thead>
<tbody>
<tr>
<td>BILLIONS OF '98 DOLLARS</td>
<td>MILLIONS OF WORKERS</td>
</tr>
<tr>
<td>318.16</td>
<td>0.89</td>
</tr>
<tr>
<td>351.27</td>
<td>0.96</td>
</tr>
</tbody>
</table>

- **+**
  - SUV's Sales Soar
  - New GM and Ford Leadership

- **-**
  - Passenger Car Sales Lag
  - Japanese Threaten Detroit Truck Dominance

### U.S. Outlook

#### DRUGS & BIOTECH
1994 - 1999

<table>
<thead>
<tr>
<th>Output</th>
<th>Employment</th>
</tr>
</thead>
<tbody>
<tr>
<td>BILLIONS OF '98 DOLLARS</td>
<td>MILLIONS OF WORKERS</td>
</tr>
<tr>
<td>79.23</td>
<td>0.26</td>
</tr>
<tr>
<td>99.68</td>
<td>0.27</td>
</tr>
</tbody>
</table>

- **+**
  - Sales Growth Stays Strong
  - Rapid Innovation

- **-**
  - Trim Soaring Drug Costs
  - "Me Too" Competitors
**U.S. Outlook**

**REAL ESTATE**
1994 - 1999

- **Output**
  - BILLIONS OF '98 DOLLARS
  - 1547.48 (94) to 1754.0 (99)

- **Employment**
  - MILLIONS OF WORKERS
  - 8.24 (94) to 9.43 (99)

**Pros**
- Low Interest Rates
- Office Inventories Low

**Cons**
- Overbuilt Budget Hotels
- Too Many Stores

---

**U.S. Outlook**

**UTILITIES**
1994 - 1999

- **Output**
  - BILLIONS OF '98 DOLLARS
  - 252.36 (94) to 262.65 (99)

- **Employment**
  - MILLIONS OF WORKERS
  - 0.75 (94) to 0.65 (99)

**Pros**
- Independent Operators
- Multi-Energy Distributors

**Cons**
- Possible Regulation
- Difficulties for Outside Utilities
**U.S. Outlook**

**SECURITIES**

1994 - 1999

**Output**
BILLIONS OF '98 DOLLARS

- 1994: 86.58
- 1999: 175.92

**Employment**
MILLIONS OF WORKERS

- 1994: 0.59
- 1999: 0.75

**+**
- Mergers Boom, Interest Rates Low
- Financial-Reform Bill

**-**
- Global Downturn
- Y2K
- Merged Financial Giants Struggle

---

**U.S. Outlook**

**FOOD**

1994 - 1999

**Output**
BILLIONS OF '98 DOLLARS

- 1994: 670.67
- 1999: 698.73

**Employment**
MILLIONS OF WORKERS

- 1994: 10.96
- 1999: 12.10

**+**
- Higher Margin Foods
- Low Commodity Prices

**-**
- Higher Wages
- No Internet Selling or Ads
**U.S. Outlook**

**RETAILING**

1994 - 1999

- **Output** (Billions of '98 Dollars)
  - 1637.01 in 1994
  - 2073.95 in 1999

- **Employment** (Millions of Workers)
  - 11.15 in 1994
  - 12.38 in 1999

**Changes:***
- Electronic Commerce Grows
- Asian Woes Had Little Effect
- Personnel Costs & Shortages
- Consumers Resist Price Hikes

**U.S. Outlook**

**HEALTH CARE**

1994 - 1999

- **Output** (Billions of '98 Dollars)
  - 694.98 in 1994
  - 807.08 in 1999

- **Employment** (Millions of Workers)
  - 9.38 in 1994
  - 10.49 in 1999

**Changes:***
- Higher Premium Increases
- Nursing Homes & Assisted Living Favored
- Medicare Cutbacks